

Algebra - Systems of Equations
Problem Solving #2

Name _____

Solve each using systems of equations.

- 1) The sum of two whole numbers is 178. They differ by 6. Find the two numbers.

- 2) Lake Met was stocked with 12,000 fish, perch and trout. Twice as many perch as trout were used to stock the lake. How many of each fish were used?

- 3) Exactly 639 tickets were sold for the school play. The number of student tickets sold was twice the number of adult tickets sold. How many adult tickets were sold? How many student tickets were sold?

- 4) Two cars stopped at a gas station and purchased a total of 100L of gasoline. The second car took 16L less than the first car. How many liters of gasoline did each car take?

- 5) Four times the smaller of two numbers is equal to three times the larger. When the larger is doubled, it exceeds their original sum by five. Find the two numbers.

- 6) A woman is four years younger than her husband. When they were married, she was five sixths as old as he. How old was each when they were married?

7) Joe is three years older than Della. In seven years Joe will be twice as old as Della was five years ago. How old are Joe and Della now?

8) In five years Art will be twice as old as Ben. Five years ago Art was three times as old as Ben. How old is each now?

9) Five years ago Monty's age was five years less than twice Rachel's age. In three years, one third of Rachel's age will be twelve years less than Monty's age. How old are they now?

10) The perimeter of a rectangular garden is 60 meters. The length equals twice the width. Find the length and the width.

11) The sum of two positive integers is 81. Their difference is 17. Find the two integers.

12) A car dealer has 52 vehicles for sale. There are 18 more sedans than minivans. How many of each vehicle is for sale?